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16. Abstracts

The state of Alabama is required under the Clean Air Act to adopt and enforce the national air quality standards for sulfur oxides, particulate matter, carbon monoxide, photochemical oxidants, hydrocarbons and nitrogen dioxide. The proposed Rules and Regulations presented, fulfills these requirements. These rules and regulations provide general measures as well as specific guidelines necessary for the attainment and maintenance of air quality standards for the State of Alabama. The permit system, control regulations, and the episode plan are defined and discussed with their respective rules.

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PROPOSED RULES AND REGULATIONS
FOR THE
STATE OF ALABAMA

November 1971

Prepared For

Environmental Protection Agency
Office of Air Programs

TRW
SYSTEMS GROUP
WASHINGTON OPERATIONS

The work upon which this publication is based was performed by Resources Research, Inc., a subsidiary of TRW Inc., pursuant to Contact No. 68-02-0048 with the Office of Air Programs, Environmental Protection Agency

PREFACE

In developing the Proposed Permit System, Proposed Air Quality Surveillance System, Proposed Emergency Episode Plan, and Proposed Control Strategy portions of the Alabama Implementation Plan, TRW Systems Group has been guided by the intent of the Federal Register, August 14, 1971, as well as extensive direct communication with Environmental Protection Agency and Alabama Division of Air Pollution Control personnel.

We are particularly indebted to Barry Gilbert and Bill Burch of the Region IV office, EPA and William Willis, John Daniel, and Cecil Cork of the Alabama Division of Air Pollution Control for their overall guidance on this project.

A large number of TRW people participated in this project; those with the most direct involvement are listed below.

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1. INTRODUCTION

On April 30, 1971 (Federal Register, Vol. 36), pursuant to Section 109 of the Clean Air Act, as amended, the Administrator of the Environmental Protection Agency promulgated national air quality standards for sulfur oxides, particulate matter, carbon monoxide, photochemical oxidants, hydrocarbons and nitrogen dioxide. Within nine months, e.g., no later than January 30, 1972, the State of Alabama is required by Section 110 of the Act to adopt and submit to the enforcement of such national standards within the State's portion of the Alabama Interstate Air Quality Control Region. These proposed Rules and Regulations along with the following four documents fulfills these requirements.

I. Proposed Air Quality Surveillance System for the State of Alabama.

II. Proposed Permit System for Sources of Air Pollution in the State of Alabama.

III. Proposed Control Strategy for the State of Alabama.

IV. Proposed Episode Plan for the State of Alabama.

The following proposed rules and regulations provide general measures as well as specific guidelines necessary for the attainment and maintenance of air quality standards for the State of Alabama. These rules and regulations are adopted in part from National Ambient Air Quality Standards Appendix B, Air Pollution Control Regulations, Federal Register, Vol. 36, No. 67, April 7, 1971; the example Environmental Protection Agency Regulations for Prevention of Air Pollution Emergency Episodes, Part 420, Appendix L, Federal Register, Vol. 36, No. 158, August 14, 1971; and Miscellaneous Amendments, Federal Register, Vol. 36, No. 206, October 23, 1971, as well as the four previously mentioned documents.

1.1 SCOPE

The rules and regulations as described herein shall apply to all operations in the State of Alabama, including Federal operations, where consistent with the terms of the Clean Air Act, as amended, regulations promulgated thereunder, and Executive Order No. 11507, entitled Prevention, Control, and Abatement of Air and Water Pollution at Federal Facilities."

1.2 PURPOSE

The purpose of these rules and regulations is to govern the application of the Implementation Planning Program for the State of Alabama and are meant to supplement the regulations in the Alabama Air Pollution Control Act of 1971, Act #769, Regular Session, 1971.

2. PERMIT SYSTEM

Rule 1. DEFINITIONS

a. Air Pollution Emergency means a situation in which meteorolo gical conditions and/or contaminant levels in the ambient air reach or exceed the levels which may cause imminent and substantial endangerment to health.

b. Control means any device which has the function of controlling the emissions from a process, fuel-burning, or refuse-burning device and thus reduces the creation of, or the emission of, air contaminants into the atmosphere, or both.

c. Source means any physical arrangement, condition or structure which may emit air contaminants. Any activity which utilizes abrasives or chemicals for cleaning or any other purpose which emits air contaminants such as cleaning the exterior of buildings shall be considered a source and may be required to obtain a Permit to Operate and comply with any other applicable parts.

Rule 2. PERMITS REQUIRED

a. Permit to Construct

Any person, building, erecting, altering or replacing any article, machine, equipment or other contrivance, the use of which may cause the issuance of or an increase in the issuance of air contaminants or the use of which may eliminate or reduce or control the issuance of air contaminants, shall first obtain authorization for such construction from the DAPC in the form of a Permit to Construct. A Permit to Construct shall remain in effect until the permit to operate the equipment for which the application was filed is granted or denied or the application is cancelled.

b. Permit to Operate

(1) Before any article, machine, equipment or other contrivance described in Rule 2a may be operated or used, a written permit shall be obtained from the DAPC. No Permit to Operate shall be granted for any article, machine, equipment or contrivance described in Rule 2a, constructed or installed without authorization as required by Rule 2a, until the information required is presented to the DAPC and such article, machine, equipment or contrivance is altered, if necessary, and made to conform to the standards established by the Commission.

(2) Any article, machine, equipment or other contrivance described in Rule 2a which is presently operating (or which is not presently operating but which is capable of being operated) without a Permit to Operate, may continue to operate (or may restart) only if its operator obtains a Permit to Operate prior to a date to be set by the Director (or prior to restarting).

(3) The Director shall have the authority to decide cases where an article, machine, equipment, or other contrivance is not clearly subject to nor exempt from the Permit System. In addition, the Director may rule that a particular article, machine, equipment or other contrivance is subject to the Permit System even though it is exempt from the System according to Rules 2a, 2b, and 3. The operator or builder of such an article, machine, equipment or other contrivance may appeal the Director's classification to the Commission, which shall overrule the Director only if it is shown that he acted arbitrarily and contrary to the purposes of the Control Act.

c. Display of Permit to Operate

A person who has been granted a Permit to Operate any article, machine, equipment, or other contrivance shall keep such Permit under file or on display at all times at the site where the

article, machine, equipment, or other contrivance is located and will make such a permit readily available for inspection by any and all persons who may request to see it.

Rule 3. EXEMPTIONS

From time to time the Director may specify certain classes or sizes of articles, machines, equipment, or other contrivances which would normally be subject to the requirement to obtain Permits to Operate or Construct, as being exempt from the requirement to obtain such permits. Exempt sources are subject in every other way to the Rules and Regulations of the Commission.

Rule 4. TRANSFER

A Permit to Construct or Operate shall not be transferable whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another.

Rule 5. APPLICATIONS

Every application for a Permit to Construct or Operate required under Rule 2 shall be filed in the manner and form prescribed by the DAPC and shall give all the information necessary to enable the DAPC to make the determination required by Rule 9 hereof.

Rule 6. CANCELLATION OF APPLICATIONS

A Permit to Construct shall expire and the application shall be canceled two years from the date of issuance of the Permit to Construct if the construction has not begun.

Rule 7. ACTION ON APPLICATIONS

DAPC shall act, within a reasonable time, on an application for authority to construct, Permit to Operate or permit to sell or

rent, and shall notify the applicant in writing of its approval, conditional approval or denial.

Rule 8. PROVISION OF SAMPLING AND TESTING FACILITIES

A person operating or using any article, machine, equipment or other contrivance for which these rules require a permit shall provide and maintain such sampling and testing facilities as specified in the Permit to Construct or Permit to Operate.

Rule 9. STANDARDS FOR GRANTING APPLICATIONS

a. DAPC shall deny a permit except as provided in Rule 10, if the applicant does not show that every article, machine, equipment or other contrivance, the use of which may cause the issuance of air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants, is so designed, controlled, or equipped with such air pollution control equipment, that it may be expected to operate without emitting or without causing to be emitted air contaminants in violation of these Rules and Regulations.

b. The DAPC shall deny a permit if the applicant does not present, in writing, a plan whereby the emission of air contaminants by every article, machine, equipment, or other contrivance described in the permit application, will be reduced during periods of an Air Pollution Alert, Air Pollution Warning, and Air Pollution Emergency in accordance with the Episode Plan Rules and Regulations.

c. Before a Permit to Construct or Permit to Operate is granted, the DAPC may require the applicant to provide and maintain such facilities as are necessary for sampling and testing purposes in order to secure information that will disclose the nature, extent, quantity or degree of air contaminants discharged into the atmosphere from the article, machine, equipment or other contrivance described in the Permit to Construct or Permit to Operate. In the event of such a requirement, the DAPC shall

notify the applicant in writing of the required size, number and location of the sampling platform; the access to the sampling platform; and the utilities for operating the sampling and testing equipment.

d. The DAPC may also require the applicant to install, use and maintain such monitoring equipment or methods; sample such emissions in accordance with such methods, at such locations, intervals and procedures as may be specified; and provide such information as the DAPC may require.

e. Before acting on an application for Permit to Construct or Permit to Operate, the DAPC may require the applicant to furnish further information or further plans or specifications.

f. In acting upon a Permit to Operate, if the DAPC finds that the article, machine, equipment or other contrivance has been constructed not in accordance with the Permit to Construct, and if the changes noted are of a substantial nature in that the amount of air contaminants emitted by the article, machine, equipment or other contrivance may be increased, or in that the effect is unknown, then it shall deny the Permit to Operate. The DAPC shall not accept any further application for a Permit to Operate until the article, machine, equipment or other contrivance has been reconstructed in accordance with the Authority to Construct, or until the applicant has proven to the satisfaction of the DAPC that the change will not cause an increase in the emission of air contaminants.

Rule 10. CONDITIONAL APPROVAL

a. The DAPC may issue a Permit to Construct or a Permit to Operate subject to conditions which will bring the operation of any article, machine, equipment or other contrivance within the standards of Rule 9, in which case the conditions shall be specified in writing. Commencing work under such a Permit to

Construct or Operate such a Permit to Operate shall be deemed acceptance of all the conditions specified. The DAPC shall issue a Permit to Construct or a Permit to Operate with revised conditions upon receipt of a new application, if the applicant demonstrates that the article, machine, equipment or other contrivance can operate within the standards of Rule 9 under the revised conditions.

b. A Conditional Permit may allow an article, machine, equipment, or other contrivance to be operated in violation of the conditions of Rule 9 if one of the conditions of the permit is a definite schedule by which the article, machine, equipment, or contrivance may attain the conditions of Rule 9 and be granted a Permit to Operate. A Conditional Permit will be revoked if the applicant does not submit progress reports to the DAPC according to the schedule established by the Conditional Permit. The DAPC may further revoke the Conditional Permit if the progress reports do not show satisfactory progress as specified by the terms of the Conditional Permit or if the progress reports are found to be inaccurate.

c. A Conditional Permit that allows an article, machine, equipment or contrivance to operate in violation of the Standards of Rule 9 may not be granted for a period of time greater than one year, including all renewals. In addition, no Conditional Permit issued on or after a date one year after the promulgation of the Implementation Plan may allow the article, machine, equipment or contrivance to operate in violation of the Standards of Rule 9 for a period of time longer than the greatest of the following two periods:

(1) 60 days

(2) The period from the granting of the permit to a date two years after the promulgation of this Implementation Plan. (Thus, when two years have passed after the promulgation

of the Implementation Plan, any article, machine, equipment or contrivance will require a variance to legally operate in violation of the Standards of Rule 9 for a period of time greater than 60 days.)

Rule 11. TEMPORARY PERMIT TO OPERATE

a. Upon application for a Permit to Operate by a new facility, the Director shall, within a reasonable period of time, dispatch an inspector to the facility in question. If the inspector determines that the facility has been constructed according to the specifications as set forth under the Permit to Construct, or else that any changes to the facility would reduce or effect to an unsubstantial degree the quantity of air contaminants emitted by the facility, and if a reviewing officer of the Division agrees with this conclusion, then the Director shall issue a temporary Permit to Operate which will remain in force until an official inspection of the facility under actual operating conditions can be made and the results reviewed, or until the Temporary Permit is suspended or revoked by the Director. The Director may issue a Temporary Permit to Operate without an inspection if the applicant fulfills the following requirements:

(1) The application for a Permit to Construct is filled out and countersigned by a Professional Engineer familiar with air pollution control as it relates to the equipment under application.

(2) Upon completion of the construction, the Professional Engineer noted above submits a letter to the Director, signed and sealed with his professional stamp, testifying that the construction under application has been completed and is in accordance with the specifications as set down in the Permit to Construct. The Director is empowered to reject the testimony of the Professional Engineer if the Director decides that the Professional Engineer's qualifications are insufficient to allow him to accurately and completely assess the equipment

the equipment in question. A Professional Engineer may appeal any such judgement to the Commission.

Rule 12. DENIAL OF APPLICATIONS

In the event of denial of a Permit to Construct or Permit to Operate, the DAPC shall notify the applicant in writing of the reasons therefor. Service of this notification may be made in person or by mail, and such service may be proved by the written acknowledgement of the persons served or affidavit of the person making the service. The DAPC shall not accept a further application unless the applicant has complied with the objections specified by the DAPC as its reasons for denial of the Permit to Construct or the Permit to Operate.

Rule 13. APPEALS

a. Within 10 days after notice by the DAPC of denial or conditional approval of a Permit to Construct or Permit to Operate, the applicant may petition the Commission, in writing, for a review. The Commission may sustain or reverse the action of the DAPC; such order may be made subject to specified conditions.

b. The applicant may also petition the Commission for a variance, as prescribed by the Control Act. A petition for a variance must state the following:

(1) The name, address and telephone number of the petitioner, or other person authorized to receive service of notices.

(2) Whether the petitioner is an individual, co-partnership, corporation or other entity, and names and address of the officers, if a corporation, and the names and address of the persons in control, if other entity.

(3) The type of business or activity involved in the application and the street address at which it is conducted.

(4) A brief description of the article, machine, equipment or other contrivance, if any, involved in the application.

(5) The signature of the petitioner, or that of some person on his behalf, and, where the person signing is not the petitioner, the authority to sign.

(6) The requirement, rule, or order complained of.

(7) The facts showing why compliance with the requirement, rule or order would impose serious hardship on the petitioner or on any other person or persons without equal or greater benefits to the public.

(8) The facts showing why the emissions occurring or proposed do not endanger or tend to endanger human health or safety, human comfort, and aesthetic values.

(9) For what period of time the variance is sought and why.

(10) The requirements the petitioner can meet and the date when petitioner can comply with such requirements.

(11) Whether or not any case involving the same identical equipment or process is pending in any court, civil or criminal.

c. All petitions shall be typewritten, double spaced, on legal or letter size paper, on one side of the paper only.

Rule 14. FAILURE TO COMPLY WITH RULES

a. The Clerk of the Commission shall not accept for filing, any petition which does not comply with these Rules relating to the form, filing and service of petitions unless the chairman or any two members of the Commission direct otherwise and confirm such direction in writing. Such direction need not be made at a meeting of the Commission.

b. The Chairman or any two members, without a meeting, may require the petitioner to state further facts or reframe a petition so as to disclose clearly the issues involved.

Rule 15. OBJECTIONS TO GRANT OF VARIANCE

a. A person may file a written objection to the grant of a variance within 21 days from initial public notice and thus insure that a public hearing will be held, according to Section 12d of the Control Act.

b. An objection to the grant of a variance must state:

(1) The objector's name, address, and telephone number.

(2) Whether the objector is an individual, co-partnership corporation or other entity, and names and address of the partners if a co-partnership, names and address of the officer, if a corporation, and the names and address of the persons in control, if other entity.

(3) A specification of which petition for a variance is being objected to.

(4) A statement indicating why the objector believes that the variance should not be granted.

c. All objections should be typewritten or carefully printed in ink on legal or letter size paper.

Rule 16. RULES OF EVIDENCE AT A HEARING

a. Each party shall have these rights: to call and examine witnesses; to introduce exhibits; to cross-examine opposing witnesses on any matter relevant to the issues even though that matter was not covered in the direct examination; to impeach any witness regardless of which party first called him to testify; and to rebut the evidence against him. If respondent does not testify in his own behalf he may be called and examined as if under cross-examination.

b. The hearing need not be conducted according to technical rules relating to evidence and witnesses. Any relevant evidence

shall be submitted if it is the sort of evidence on which responsible persons are accustomed to rely in the conduct of serious affairs, regardless of the existence of any common law or statutory rule which might make improper the admission of such evidence over objection in civil actions. Hearsay evidence may be used for the purpose of supplementing or explaining any direct evidence but shall not be sufficient in itself to support a finding unless it would be admissible over objection in civil actions. The rules of privilege shall be effective to the same extent that they are now or hereafter may be recognized in civil actions, and irrelevant and unduly repetitious evidence shall be excluded.

3. CONTROL REGULATIONS

Rule 1. DEFINITIONS

a. Control means any device which has the function of controlling the emissions from a process, fuel-burning, or refuse-burning device and thus reduces the creation of, or the emission of air contaminants into the atmosphere, or both.

b. Control Strategy means a collection of various emission standards selected for the different categories of sources.

c. Control Regulation means a legally enforceable emission control strategy.

d. County Classification means the designation Class 1 County or Class 2 County. All facilities, plants or other installations shall be subject to the restrictions on air pollution emissions specific to the county classification of the county in which they are located.

(1) A Class 2 County is defined as a county in which:

(a) More than 50 percent of the county population resides in a non-urban place, as defined by the U.S. Department of Commerce Census Bureau for 1970.

(b) No secondary Nation Ambiert Air Quality standard is being exceeded based on 1971 air quality measurements.

(2) A Class 1 County is defined as a county in which either Rule 1.d.(1)(a) or (b) or both are not met.

e. Effluent Water Separator means any tank, box, sump, or other container in which any volatile organic compound floating on or entrained or contained in water entering such tank, box, sump, or other container is physically separated and removed from such water prior to outfall, drainage, or recovery of such water.

f. Fuel-Burning Equipment means any equipment, device, or contrivance and all appurtenances thereto, including ducts, breechings, fuel-feeding equipment, ash removal equipment, combustion controls, stacks and chimney, used primarily, but not exclusively, to burn any fuel for the purpose of indirect heating in which the material

being heated is not contacted by and adds no substance to the products of combustion.

g. Fugitive Dust means solid air-borne particulate matter emitted from any source other than a flue or stack.

h. Heat Available means the aggregate heat content of all fuels whose products of combustion pass through a stack or stacks.

i. Heat Input means the equipment manufacturer's or designer's guaranteed maximum (whichever is greater) capacity of the fuel combustion unit.

j. Incinerator means any equipment, device or contrivance and all appurtenances thereof used for the destruction by burning of solid, semi-solid, liquid, or gaseous combustible wastes.

k. Maximum Process Weight Per Hour means the equipment manufacturer's or designer's guaranteed maximum (whichever is greater) process weight per hour.

l. Multiple Chamber Incinerator means any incinerator consisting of three or more refractory lined combustion chambers in series, physically separated by refractory walls, interconnected by gas passage ports or ducts and employing adequate design parameters necessary for maximum combustion of the material to be burned.

m. New Source means equipment, machines, devices, articles, contrivances, or installations built or installed on or after the effective date of these regulations, and installations existing at said stated time which are later altered, repaired, or rebuilt. Any equipment moved to another premise involving a change of address, or purchased and to be operated by a new owner, or when a new lessee desires to operate such equipment after the effective date of these regulations shall be considered a new source.

n. Odor means smells or aromas which are unpleasant to persons, or which tend to lessen human food and water intake, interfere with sleep, upset appetite, produce irritation of the upper respiratory tract, or cause symptoms of nausea, or which by their inherent chemical or physical nature, or method of processing, are, or may

be, detrimental or dangerous to health. Odor and smell are used interchangeably herein.

o. Opacity means the obscuration to an observer's view produced by smoke of any color that is equivalent to an obscuration by smoke of a shade specified in the Ringelmann Smoke Chart published by the United States Bureau of Mines.

p. Open Burning means the burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the ambient air without passing through an adequate stack, duct, or chimney.

q. Operating Time means the number of hours per year that a source conducts operations.

r. Particulate Matter means finely divided material, except uncombined water which is a liquid or a solid at standard conditions of temperature at 68°F and pressure at 14.7 pounds per square inch absolute.

s. Process means any action, operation, or treatment of materials, including handling and storage thereof, which may cause discharge of an air contaminant, or contaminants, into the atmosphere, but excluding fuel burning and refuse burning.

t. Process Weight means the total weight in pounds of all materials introduced into any specific process which may cause any discharge into the atmosphere.

u. Process Weight Per Hour means the total weight of all materials introduced into any specific process that may cause any discharge of particulate matter. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not. For a cyclical or batch operation, the process weight per hour will be derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle. For a continuous operation, the process weight per hour will be de-

rived by dividing the process weight for a typical period of time by that time period.

v. Refuse means matter consisting of garbage, rubbish, ashes, street debris, dead animals, abandoned vehicles, industrial wastes, demolition wastes, construction wastes, special wastes, or sewage treatment residue.

w. Ringelmann Chart means the chart published and described in U.S. Bureau of Mines Information Circular 8333.

x. Smoke means small gas-borne particles resulting from incomplete combustion, consisting predominantly, but not exclusively, of carbon, ashes, or other combustible material.

y. Soiling Index means a measure of the soiling properties of suspended particles in air determined by drawing a measured volume of air through a known area of Whatman No.4 filter paper for a measured period of time, expressed as COHs/1,000 linear feet.

z. Source means any physical arrangement, condition, or structure which may emit air contaminants. Any activity which utilizes abrasives or chemicals for cleaning or any other purpose which emits air contaminants such as cleaning the exterior of buildings shall be considered a source and shall be required to obtain a permit to operate and comply with any other applicable parts.

a.a. Stack means any chimney, flue, conduit, or duct that is arranged, or used, to conduct a gaseous or particulate effluent, or both, to the open air.

b.b. Submerged Fill Pipe means any fill pipe, the discharge opening of which is entirely submerged when the liquid level is 6 inches above the bottom of the tank; or when applied to a tank which is loaded from the side, shall mean any fill pipe, the discharge opening of which is entirely submerged when the liquid level is two times the fill pipe diameter, in inches, above the bottom of the tank.

c.c. Use Factor means the ratio of the equipment manufacturer's or designer's guaranteed maximum (whichever is greater) source capacity divided by the source usage.

(1) Fuel Combustion Sources

The Use Factor for fuel combustion sources is defined as the ratio of the Heat Input divided by the Heat Available.

(2) Process Sources

The Use Factor for process sources is defined as the ratio of the Maximum Process Weight Per Hour divided by the Process Weight Per Hour.

d.d. Volatile Organic Compounds mean any compound containing carbon and hydrogen or containing carbon and hydrogen in combination with any other element which has a vapor pressure of 1.5 pounds per square inch absolute or greater under actual storage conditions.

Rule 2. CONTROL OF OPEN BURNING AND INCINERATION

a. Open Burning

No person shall ignite, cause to be ignited, permit to be ignited, or maintain any open fire except as follows:

(1) Open fires for the cooking of food for human consumption on other than commercial premises;

(2) Fires for recreational or ceremonial purposes;

(3) Fires to abate a fire hazard, providing the hazard is so declared by the fire department or fire district having jurisdiction;

(4) Fires for prevention or control of disease or pests;

(5) Fires for training personnel in the methods of fighting fires;

(6) Fires for the disposal of dangerous materials, where there is no alternate method of disposal and burning is approved by the Director.

(7) Fires for the disposal of leaves on other than commercial premises;

(8) Open fires specifically approved by the Director.

b. Incinerator Design and Operation

(1) All new incinerators and all existing incinerators within 18 months after adopted date of this regulation shall be multiple-chamber incinerators, provided that the Director may approve any other type of incincerator if it is demonstrated such design provides equivalent performance.

(2) No person shall operate or cause or permit the operation of any incinerator at any time other than between the hours of 10 a.m. and 4 p.m. This restriction shall not apply to incinerators having a refuse-burning capacity of five tons per hour or more.

(3) Incinerators shall be designed and operated in such a manner as is necessary to prevent the emission of objectionable odors.

(4) No person shall cause or permit to be emitted into the open air from any incinerator, particulate matter in the exhaust gases to exceed 0.10 pounds per 100 pounds of refuse charged.

(5) Emission tests shall be conducted at maximum burning capacity of the incinerator.

(6) The burning capacity of an incinerator shall be the manufacturer's or designer's guaranteed maximum rate or such other rate as may be determined by the Director in accordance with good engineering practices. In case of conflict, the determination made by the Director shall govern.

(7) For the purposes of this regulation, the total of the capacities of all furnaces within one system shall be considered as the incinerator capacity.

Rule 3. CONTROL OF PARTICULATE EMISSIONS

a. Visible Emissions

(1) Visible Emissions Restrictions for Stationary Sources

(a) No person shall discharge into the atmosphere from any single source of emission whatsoever any air contaminant of a shade or density equal to or darker than that designated as No.1 on the Ringelmann chart or 20 percent opacity.

(b) A person may discharge into the atmosphere from any single source of emission for a period or periods aggregating not more than three minutes in any 60 minutes air contaminants of a shade of density not darker than that designated as No.3 on the Ringelmann chart or 60 percent opacity.

(2) Visible Emission from Mobile Sources

No person shall operate, or cause to be operated, upon any street, highway, public place, stream or waterway, within the State of Alabama any internal combustion engines of any motor vehicle, boat, tug or other vehicle, while stationary or moving, which emits from any source any unreasonable and excessive smoke or objectional odor.

(3) Visible Emissions

No person shall cause or permit the discharge of visible emissions beyond the lot line of the property on which the emissions originate.

(4) Uncombined Water

Where the presence of uncombined water is the only reason for failure of an emission to meet the requirements of this regulation (Rule 3.a.), such sections shall not apply.

b. Fugitive Dust

(1) No person shall cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, but not be limited to, the following:

(a) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;

(b) Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stock piles, and other surfaces which can create airborne dusts;

(c) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.

(2) When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any regulation, the Director may order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air.

c. Fuel Burning Equipment

(1) Class 1 Counties: No person shall cause or permit the emission of particulate matter from fuel-burning equipment in a Class 1 county in excess of the amount shown in Table 3-1 for the heat input allocated to such source. For sources in Class 1 counties, interpolation of the data in Table 3-1 for heat input values between 10 million BTU/hr and 250 million BTU/hr shall be accomplished by the use of the equation:

$$E = 1.58H^{-0.50}$$

where: E = Emissions in lb/million BTU
H = Heat Input in millions of BTU/hr

(2) Class 2 Counties: No person shall cause or permit the emission of particulate matter from fuel-burning equipment in a Class 2 county in excess of the amount shown in Table 3-1 for the heat input allocated to such source. For sources in Class 2 counties, interpolation of the data in Table 3-1 for heat input values between 10 million BTU/hr and 250 million BTU/hr shall be accomplished by the use of the equation:

$$E = 3.54H^{-0.65}$$

where: E = Emissions in lb/million BTU
H = Heat Input in millions of BTU/hr

TABLE 3-1 ALLOWABLE PARTICULATE MATTER EMISSION BASED ON HEAT INPUT

Heat Input (millions of BTU/hr)	Allowable Emission (lb/million BTU) Class 1 County	Class 2 County
1.	.5	.8
10.	.5	.8
20.	.35	.51
40.	.25	.33
60.	.20	.25
80.	.18	.21
100.	.16	.18
150.	.13	.14
200.	.11	.12
250.	.1	.1
1,000,000.	.1	.1

(3) For purposes of this regulation (Rule 3.c), the total heat input from all similar fuel combustion units at a plant or premises shall be used for determining the maximum allowable emission of particulate matter that passes through a stack or stacks. The allowable emissions on an annual basis shall be calculated by the use of the equation:

$$AE = \frac{E\ H\ OT}{2000\ UF}$$

where: AE = Annual emission rate in tons/year
E = Emission rate as determined by Rule 3.c. in lb/million BTU
H = Heat input in millions of BTU/hr
OT = Source operating time in hours/year
UF = Use factor.

(4) No person shall cause or permit the type or quantity of fuel utilized by a source to be changed in such a manner that the source particulate matter emissions are increased. The existing type and quantity of fuels utilized by a source are defined as those fuels in use in 1971.

(5) New sources emitting particulate matter shall be subject to the regulations for Class 1 Counties, Rule 3.c.(1).

d. Process Industries - General

(1) Class 1 Counties: No person shall cause or permit the emission of particulate matter in any one hour from any source in a Class 1 county in excess of the amount shown in Table 3-2 for the process weight per hour allocated to such source. For sources in Class 1 counties, interpolation of the data in Table 3-2 for the process weight per hour values up to 60,000 lbs/hr shall be accomplished by use of the equation:

$$E = 3.59\ P^{0.62} \qquad P \leq 30 \text{ tons/hr}$$

and interpolation and extrapolation of the data for process weight per hour values in excess of 60,000 lbs/hr shall be accomplished by use of the equation:

$$E = 17.31\ P^{0.16} \qquad P > 30 \text{ tons/hr}$$

where: E = Emissions in pounds per hour
P = Process weight per hour in tons per hour.

(2) Class 2 Counties: No person shall cause or permit the emission of particulate matter in any one hour from any

TABLE 3-2 ALLOWABLE PARTICULATE MATTER EMISSION BASED ON PROCESS WEIGHT RATE

Process Weight Rate (lb/hr)	Allowable Emission Rate (lb/hr)	
	Class 1 County	Class 2 County
100	0.55	0.55
500	1.53	1.61
1,000	2.25	2.58
5,000	6.34	7.58
10,000	9.23	12.00
20,000	14.99	19.20
60,000	29.60	40.00
80,000	31.19	42.50
120,000	33.28	46.30
160,000	34.85	49.00
200,000	36.11	51.2
1,000,000	46.72	69.00

source in a Class 2 county in excess of the amount shown in Table 3-2 for the process weight per hour allocated to such source. For sources in Class 2 counties interpolation of the data in Table 3-2 for the process weigh per hour values up to 60,000 lbs/hr shall be accomplished by use of the equation:

$$E = 4.10\ P^{0.67} \qquad P \leq 30 \text{ tons/hr}$$

and interpolation and extrapolation of the data for process weight per hour values in excess of 60,000 lbs/hr shall be accomplished by use of the equation:

$$E = 55.0\ P^{0.11} \qquad P > 30 \text{ tons/hr}$$

where: E = Emissions in pounds per hour
P = Process weight per hour in tons per hour.

(3) Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this regulation (Rule 3.d), the interpretation that results in the minimum value for allowable emission shall apply.

(4) For purposes of this regulation (Rule 3.d), the total process weight from all similar process units at a plant or premises shall be used for determining the maximum allowable emission of particulate matter that passes through a stack or stacks. The allowable emissions on an annual basis shall be calculated by the use of the equation:

$$AE = \frac{E\ OT}{2000\ UF}$$

where: AE = Annual emission rate in tons/year
E = Emission rate as determined by Rule 3.d in lbs/hr
OT = Source operating time in hours/year
UF = Use factor

(5) New sources emitting particulate matter shall be subject to the regulations for Class 1 counties, Rule 3.d.(1).

Rule 4. CONTROL OF SULFUR COMPOUND EMISSIONS

a. Fuel Combustion

(1) Class 1 Counties. No person shall cause or permit the operation of a fuel burning installation in a Class 1 county in such a manner that sulfur oxides, measured

as sulfur dioxide, are emitted in excess of 1.0 pound per million BTU heat input.

(2) Class 2 Counties. No person shall cause or permit the operation of a fuel burning installation in a Class 2 county in such a manner that sulfur oxides, measured as sulfur dioxide, are emitted in excess of 1.5 pounds per million BTU heat input.

(3) For purposes of this regulation (Rule 3.d), the total heat input from all similar fuel combustion units at a plant or premises shall be used for determining the maximum allowable emission of sulfur dioxide that passes through a stack or stacks. The allowable emissions on an annual basis shall be calculated by the use of the equation:

$$AE = \frac{E\ H\ OT}{2000\ UF}$$

where: AE = Annual emission rate in tons/year
E = Emission rate as determined by Rule 3.d in lbs/million BTU
OT = Source operating time in hours/year
UF = Use factor

(4) No person shall cause or permit the type or quantity of fuel utilized by a source to be changed in such a manner that the source sulfur dioxide emission is increased. The existing type and quantity of fuels utilized by a source are defined as those fuels in use in 1971.

(5) New sources emitting sulfur oxides, measured as sulfur dioxide, shall be subject to the regulations for Class 1 counties, Rule 4.a.(1).

(6) No person shall cuase or permit the emission or combustion of any refinery process gas stream or any other process gas stream that contains H_2S in concentrations greater than 150 ppm without removal of the hydrogen sulfide in excess of this concentration.

b. Sulfuric Acid Plants

(1) No person shall cause or permit sulfur dioxide tail gas emissions from sulfuric acid manufacturing plants to exceed 6.5 lb/ton of 100 percent acid produced. The tail gas acid mist emissions are not to exceed 0.5 lb/ton of acid produced and the sulfur trioxide emissions are not to exceed 0.2 lb/ton of acid produced.

c. Sulfur Recovery Plants

(1) No person shall cause or permit the sulfur oxide emission from a sulfur recovery plant to exceed 0.01 pounds per pound of sulfur processed.

Rule 5. CONTROL OF HYDROCARBON EMISSIONS FROM STATIONARY SOURCES

a. Storage of Volatile Organic Materials

(1) No person shall place, store, or hold in any stationary tank reservoir or other container of more than 40,000 gallons capacity any volatile organic compounds unless such tank, reservoir, or other container is a pressure tank capable of maintaining working pressures sufficient at all times to prevent vapor or gas loss to the atmosphere or is designed, and equipped with one of the following vapor loss control devices:

(a) A floating roof, consisting of a pontoon type, double deck type roof or internal floating cover, which will rest on the surface of the liquid contents and be equipped with a closure seal or seals to close the space between the roof edge and tank wall. This control equipment shall not be permitted if the volatile organic compounds have a vapor pressure of 11.0 pounds per square inch absolute (568 mm.Hg) or greater under actual storage conditions. All tank gauging or sampling devices shall be gas-tight except when tank gauging or sampling is taking place.

(b) A vapor recovery system, consisting of a vapor gathering system capable of collecting the volatile organic compound vapors and gases discharged and a vapor disposal system capable of processing such volatile organic vapors and gases so as to prevent their emission to the atmosphere and with all tank gauging and sampling devices gas-tight except when gauging or sampling is taking place.

(c) Other equipment or means of equal efficiency for purposes of air pollution control as may be approved by the Director.

(2) No person shall place, store, or hold in any stationary storage vessel more than 250-gallon capacity any volatile organic compound unless such vessel is equipped with a permanent submerged fill pipe or is a pressure tank as described in Rule 5.a.(1), or is fitted with a vapor recovery system as documented in Rule 5.a.(1)(b).

b. Volatile Organic Materials Loading Facilities

(1) No person shall load any volatile organic compounds into any tank, truck or trailer from any loading facility unless such loading facility is equipped with a vapor collection and disposal system or its equivalent, properly installed, in good working order; and in operation.

(2) No person shall load any volatile organic compounds into any tank, truck or trailer having a capacity in excess of 200 gallons unless such loading facility is equipped with a loading arm with a vapor collection adaptor, pneumatic, hydraulic, or other mechanical means which forces a vapor-tight seal between the adaptor and the hatch. A means shall be provided to prevent liquid organic compounds drainage from the loading device when it is removed from the hatch of any tank, truck or trailer. When loading is effected through means other than hatches, all loading and vapor lines shall be equipped with fittings which make vapor-tight connections and which close automatically when disconnected.

c. Volatile Organic Compound Water Separation

(1) No person shall use any compartment of any single or multiple compartment volatile organic compound water separation which receives effluent water containing 200 gallons a day or more of any equipment processing, refining, treating, storing, or handling volatile organic compounds unless such compartment is equipped with one of the following vapor loss control devices, properly installed, in good working order, and in operation.

(a) A container having all openings sealed and totally enclosing the liquid contents. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

(b) A container equipped with a floating roof, consisting of a pontoon type, double deck type roof, or internal floating cover, which will rest on the surface of the contents and be equipped with a closure seal or seals to close the space between the roof edge and container wall. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

(c) A container equipped with a vapor recovery system consisting of a vapor gathering system capable of collecting the hydrocarbon vapors and gases discharged and a vapor disposal system capable of processing such hydrocarbon vapors and gases so

as to prevent their emission to the atmosphere and with all container gauging and sampling devices gas-tight except when gauging or sampling is taking place.

(d) A container having other equipment of equal efficiency for purposes of air pollution control as may be approved by the Director.

d. Pumps and Compressors

All pumps and compressors handling volatile organic compounds shall have mechanical seals or other equipment of equal efficiency for purposes of air pollution control as may be approved by the Director.

e. Waste Gas Disposal

(1) No person shall emit a waste gas stream from any ethylene producing plant into the atmosphere unless the waste gas stream is properly burned at 1,300°F for 0.3 seconds or greater in a direct-flame afterburner equipped with an indicating pyrometer which is positioned in the working area at the operator's eye level or an equally effective catalytic vapor incinerator also with pyrometer.

(2) No person shall emit hydrocarbon gases to the atmosphere from a vapor blowdown system unless these gases are burned by smokeless flares, or an equally effective control device as approved by the Director.

f. Organic Solvents

(1) A person shall not discharge more than 3 pounds per hour or 15 pounds per day of organic materials into the atmosphere from any article, machine, equipment or other contrivance in which organic solvent comes into contact with flames or is baked, heated-cured, or heat polymerized, in the presence of oxygen.

(2) A person shall not discharge more than 40 pounds of organic material into the atmosphere in any one day from any article, machine, equipment, or other contrivance used under conditions other than described in Rule 5.f.(1) for employing, applying, evaporating, or drying any photochemically reactive solvent, as defined in Rule 5.f.(11), or material containing such solvent, unless all organic materials discharged from such article, machine, equipment or other contrivance have been reduced to not more than 40 pounds in any one day.

(3) Any series of articles, machines, equipment, or other contrivances designed for processing a continuously

moving sheet, web, strip, or wire which is subjected to any combination of operations described in Rule 5.f.(1) or (2) involving any photochemically reactive solvent, as defined in Rule 5.f.(11) or material containing such solvent, shall be subject to compliance with Rule 5.f.(2). Where only nonphotochemically reactive solvents or material containing only nonphotochemically reactive solvents are employed or applied, and where any portion or portions of said series of articles, machines, equipment, or other contrivances involves operations described in Rule 5.f.(1), said portions shall be collectively subject to compliance with Rule 5.f.(1).

(4) Emissions of organic materials to the atmosphere from the cleanup with photochemically reactive solvents, as defined in Rule 5.f.(11), of any article, machine, equipment, or other contrivance described in Rule 5.f.(1), (2), or (3), shall be included with the other emissions of organic materials from that article, machines, equipment, or other contrivance for determining compliance with this rule.

(5) Emissions of organic materials to the atmosphere as a result of spontaneously continuing drying of products for the first 12 hours after their removal from any article, machine, equipment, or other contrivance described in Rule 5.f.(1), (2), or (3), shall be included with other emissions of organic materials from that article, machine, equipment, or other contrivance, for determining compliance with this rule.

(6) Emissions of organic materials into the atmosphere required to be controlled by Rule 5.f.(1), (2), (3), shall be reduced by:

(a) Incineration, provided that 90 percent or more of the carbon in the organic material being incinerated is oxidized to carbon dioxide, or

(b) Adsorption, or

(c) Processing in a manner determined by the Director to be not less than effective that (a) or (b) above.

(7) A person incinerating, adsorbing, or otherwise processing organic materials pursuant to this rule shall provide, properly install, and maintain in calibration, in good working order and in operation, devices as specified in the authority to construct or the permit to operate, or as specified by the Director, for indicating temperatures, pressures, rates of flow, or other operating

conditions necessary to determine the degree and effectiveness of air pollution control.

(8) Any person using organic solvents or any materials containing organic solvents shall supply the Director, upon request and in the manner and form prescribed by him, written evidence of the chemical composition, physical properties, and amount consumed for each organic solvent used.

(9) The provisions of this rule shall not apply to:

(a) The manufacture of organic solvents, or the transport or storage of organic solvents or materials containing organic solvents.

(b) The use of equipment for which other requirements are specified by Rule 5.a, b, or c, or which are exempt from air pollution control requirements by said rules.

(10) For the purposes of Rule 5.f., organic solvents include diluents and thinners and are defined as organic materials which are liquids at standard conditions and which are used as dissolvers, viscosity reducers, or cleaning agents.

(11) For the purposes of Rule 5.f., a photochemically reactive solvent is any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified below or which exceeds any of the following individual percentage composition limitations, referred to the total volume of solvent:

(a) A combination of hydrocarbons, alcohols, adehydes, esters, ethers, or ketones having an olefinic or cyclo-olefinic type of unsaturation: 5 percent;

(b) A combination of aromatic compounds with either two or more carbon atoms to the molecule except ethylbenzene: 8 percent;

(c) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.

Whenever any organic solvent or any constitutent of an organic solvent may be classified from its chemical structure into more than one of the above groups of organic compounds, it shall be considered as a member of the most reactive chemical group, that is, that group having the least allowable percent of the total volume of solvents.

(12) For the purposes of Rule 5.f., organic materials are defined as chemical compounds of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, etallic carbides, etallic carbonates, and ammonium carbonate.

g. Disposal and Evaporation of Solvents

A person shall not, during any one day, dispose of a total of more than 1.5 gallons of any photochemically reactive solvent, as defined in Rule 5.f.(11), or of any material containing more than 1.5 gallons of any such photochemically reactive solvent by any means which will permit the evaporation of such solvent into the atmosphere.

Rule 6. CONTROL OF CARBON MONOXIDE EMISSIONS

a. No person shall emit the carbon monoxide gases generated during the operation of a grey iron cupola, blast furnace, or basic oxygen steel furnace unless they are burned at 1,300°F for 0.3 seconds or greater in a direct flame afterburner or equivalent device equipped with an indicating pyrometer which is positioned in the working area at the operator's eye level.

b. No person shall emit carbon monoxide waste gas stream from any catalyst regeneration of a petroleum cracking system, petroleum fluid coker, or other petroleum process into the atmosphere, unless the waste gas stream is burned at 1,300°F for 0.3 seconds or greater in a direct-flame afterburner or boiler equipped with an indicating pyrometer which is positioned in the working area at the operator's eye level.

Rule 7. CONTROL OF NITROGEN OXIDES EMISSIONS

a. Combustion Sources

(1) No person shall cause or permit emissions of nitrogen oxides from a gas-fired boiler with a capacity of 250 million BTU/hr or more in excess of 0.20 pounds per million BTU of heat input per hour.

(2) No person shall cause or permit emissions of nitrogen oxides from an oil-fired boiler with a capacity of 250 million BTU/hr or more in excess of 0.30 pounds per million BTU of heat input per hour.

(3) No person shall cause or permit emission of nitrogen oxides from a coal-fired boiler with a capacity of 250 million BTU per hour or more in excess of 0.9 pounds per million BTU of heat input per hour.

(4) For purposes of this regulation (Rule 7.a.), the total heat input from all similar fuel combustion units at a plant or premises shall be used for determining the maximum allowable emission of nitrogen oxides that passes through a stack or stacks. The allowable emissions on an annual basis shall be calculated by the use of the equation:

$$AE = \frac{E\ H\ OT}{2000\ UF}$$

where: AE = Annual emission rate in tons/year
E = Emission rate as determined by Rule 7.a. in lb/million BTU
H = Heat input in millions of BTU/hr
OT = Source operating time in hours/year
UF = Use factor.

b. Nitric Acid Manufacture

No person shall cause or permit the emission of nitrogen oxides calculated as nitrogen dioxide, from nitric acid manufacturing plants in excess of 5.5 pounds per ton of 100 percent acid produced.

4. EPISODE PLAN

Rule 1. DEFINITIONS

- State means the State of Alabama

Rule 2. AIR POLLUTION EMERGENCY

The Director is authorized and empowered to enforce or require enforcement of any parts of the Emergency Episode Plan for Air Pollution Sources in the State of Alabama.

Rule 3. EPISODE CRITERIA

When the Director determines that conditions justify the proclamation of an air pollution episode stage, due to the accumulation of air pollutants in any place within the State, attaining levels which could, if sustained or exceeded, lead to a substantial threat to the health of persons, he shall be guided by the following criteria.

a. Episode stages shall be determined and declared upon the basis of average concentrations recorded at any monitoring station in the State.

b. If contamination and meteorology warrant, any advanced episode stage may be declared by the Director without first declaring a lesser degree of Alert or Watch. The Director shall, at his discretion, declare a lesser stage, the termination or the continuance of the advanced episode stage during such times when contamination and meteorological conditions moderate significantly after an advanced episode stage has been declared.

c. Episode Watch

The Director shall declare an Episode Watch when one or more of the following events take place.

(1) An Atmospheric Stagnation Advisory is issued by the National Weather Service, stating that atmospheric conditions marked by a slow moving high pressure system, light winds, and temperature inversions are expected to affect the State of Alabama or portions thereof for the next 36 hours.

(2) A forecast by local meteorologists that stagnant atmospheric conditions as described above could result in high air pollution levels in Alabama or portions thereof.

(3) Validated reports of abnormally high air pollution measurements, specifically, reaching or exceeding 50 percent of the Alert level (Rule 3d) for at least three consecutive hours at a given locality in the State.

d. Alert

The Director shall declare an Alert when any one of the following pollutant concentrations is measured at any monitoring site, and due to adverse meteorological conditions can be expected to remain at these levels or higher for the next 12 hours or more unless control measures are taken:

Sulfur Dioxide. Measured by continuous coulometric or colorimetric analyzer, or equivalent.

24-hour average, 0.30 ppm (800 $\mu g/m^3$)

Particulates. Measured by sequential tape sampler, two-hour accumulations (soiling index).

24-hour average, 3.0 COHS per 1000 linear feet

or measured by Hi Vol (high volume sampler), 24-hour accumulation.

24-hour average, 375 $\mu g/m^3$

Sulfur Dioxide and Particulates Combined. Product of concurrent 24-hour average concentrations.

sulfur dioxide, ppm, times particulates, COHs, equals 0.2

sulfur dioxide, $\mu g/m^3$, times particulates, $\mu g/m^3$, equals 65,000

Carbon Monoxide. Measured by continuous non-dispersive infrared analyzer, or equivalent.

8-hour average, 15 ppm (17 mg/m^3)

Nitrogen Dioxide. Measured by continuous analyzer, or equivalent.

24-hour average, 0.15 ppm (282 $\mu g/m^3$)
or 1-hour average, 0.6 ppm (1130 $\mu g/m^3$)

Photochemical Oxidants. Measured by continuous chemiluminescent analyzer or equivalent.

1-hour average, 0.1 ppm (200 $\mu g/m^3$)

e. Warning

A Warning shall be declared by the Director when the concentrations of any of the following air pollutants measured at any monitoring site and due to adverse meteorological conditions can be expected to remain at these levels or higher for the next 12 hours or more unless control measures are taken:

Sulfur Dioxide. Measured by continuous coulometric or colorimetric analyzer, or equivalent.

24-hour average, 0.6 ppm (1600 $\mu g/m^3$)

Particulates. Measured by sequential tape sampler, two-hour accumulations (soiling index).

24-hour average, 5.0 COHs per 1000 linear feet

or measured by Hi Vol, 24-hour accumulation:

24-hour average, 625 $\mu g/m^3$

Sulfur Dioxide and Particulates Combined. Product of concurrent 24-hour average concentrations.

sulfur dioxide, ppm, times particulates, COHs, equals 0.8

or sulfur dioxide, $\mu g/m^3$, times particulates, $\mu g/m^3$, equals 261,000

Carbon Monoxide. Measured by continuous non-dispersive infrared analyzer, or equivalent.

8-hour average, 30 ppm (34 mg/m^3)

Nitrogen Dioxide. Measured by continuous analyzer, or equivalent.

24-hour average, 0.30 ppm (565 $\mu g/m^3$)

1-hour average, 1.20 ppm (2260 $\mu g/m^3$)

Photochemical Oxidants. Measured by continuous chemiluminescent analyzer, or equivalent.

1-hour average, 0.40 ppm (800 $\mu g/m^3$)

f. Emergency

When the following concentrations of air pollutants have been reached or due to meteorological conditions can be expected to reach or exceed these levels at any monitoring site in the State for a period of 12 hours or more unless control actions are taken, the Director shall declare an Emergency:

Sulfur Dioxide. Measured by continuous coulometric or colorimetric analyzer, or equivalent.

24-hour average, 0.8 ppm (2100 $\mu g/m^3$)

Particulates. Measured by sequential tape sampler, two-hour accumulations (soiling index).

24-hour average, 7.0 COHs per 1000 linear feet

or measured by Hi Vol, 24-hour accumulation

24-hour average, 875 $\mu g/m^3$

Sulfur Dioxide and Particulates Combined. Product of concurrent 24-hour average concentrations.

sulfur dioxide, ppm, times particulates, COHs, equals 1.2

or sulfur dioxide, $\mu g/m^3$, times particulates, $\mu g/m^3$, equals 393,000

Carbon Monoxide. Measured by continuous non-dispersive infrared analyzer, or equivalent.

8-hour average, 40 ppm (46 mg/m^3)

Nitrogen Dioxide. Measured by continuous analyzer, or equivalent.

24-hour average,0.40 ppm (750 $\mu g/m^3$)

1-hour average, 1.60 ppm (3000 $\mu g/m^3$)

Photochemical Oxidants. Measured by continuous chemiluminescent analyzer, or equivalent.

1-hour average, 0.60 ppm (1200 $\mu g/m^3$)

g. Termination

The status reached by application of the Episode Criteria (Rule 3) shall remain in effect until the criteria for that level is no longer met. At such time, the next lower status will be assumed and such changes declared by the Director. Specifically:

(1) When ambient pollutant concentrations fall below the critical levels for the stage, and a downward trend of concentrations is established; and

(2) When meteorological conditions that attended the high concentrations are no longer called for in official weather predictions.

A public declaration will take on of the following forms.

(1) Terminate "Emergency Status," resume "Warning Status" or "Alert Status"; whichever is appropriate.

(2) Terminate "Warning Status," resume "Alert Status" or appropriate stage.

(3) Terminate "Episode Status."

Upon termination of an "Episode Status," the Division of Air Pollution Control will remain on internal "Episode Watch" until a return to normal operation is announced by the Division Director.

h. Status Declaration Authority

The Director, Division of Air Pollution Control, or his duly authorized agent, shall have the authority to make an announcement of internal Episode Watch, and public declarations of Alert, Warning and Emergency Status.

Rule 4. SPECIAL EPISODE CRITERIA

a. The Director shall have the authority to declare episodic conditions when the atmospheric concentration of a single pollutant or that of a specific locality within the State show elevated concentrations.

b. Specific Pollutant Situation

When concentrations of one or two pollutants reach or exceed the defined criteria levels, and concentrations of other pollutants remain substantially below 50 percent of Alert levels, and meteorlogical conditions are such that

these specific pollutant concentrations can be expected to remain at the above levels for 12 hours or more or increase unless control action is taken, a Specific Alert, Warning, or Emergency Status shall be declared by the Director, naming the pollutants that meet the respective criteria. In such instances when two such pollutants meet different criteria, the Director shall declare the status for the episode having the higher level, and that an Episode Watch is being maintained on the remaining pollutants.

c. Specific Locality Situation

The Director shall, when high concentrations of one or more pollutants measured at one monitoring site and not others and the effect is judged to originate from an identifiable source near the given site, shall declare the appropriate local Alert, Warning, or Emergency Status for the delineated area and that an Episode Watch is in effect for the remaining portion of the jurisdictional area while meteorological conditions favor the maintenance or increase of said high concentrations for at least 12 hours or more unless control action is taken.

Rule 5. EMISSION REDUCTION PLANS

a. Episode Watch

The Director shall in the case of imminent possibility of an Episode Watch, advise designated (by the Director) pollutant sources of impending emission reduction possibilities. These sources shall take the appropriate preparatory measures as designated by the Director.

b. Total Suspended Particulates (TSP), Alert Status

When the Director declares an Alert Status for particulates, any person responsible for the operation of a source of such pollutants shall taken the following general measures in addition to all specific source curtailments designated by the Director.

(1) Solid or liquid waste incineration from office buildings, apartment houses, and other facilities not specifically designated by the Director shall be accomplished only between noon and 4:00 p.m.

(2) There shall be no open burning of tree waste, vegetation, refuse, or debris in any form.

(3) Soot blowing or boiler lancing on fuel-burning equipment, if required, shall be accomplished only between noon and 4:00 p.m.

(4) Industrial batch processes and incinerators shall be reduced to 50 percent or less of normal operation and prepared for shutdown.

c. Total Suspended Particulates, Warning Status

When the Director declares a Warning Status for particulates, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailments designated by the Director.

(1) Solid or liquid waste incineration from office buildings, apartment houses, and other facilities not specifically designated by the Director shall be postponed until episode termination.

(2) There shall be no open burning of tree waste, vegetation, refuse, or debris in any form.

(3) Soot blowing or boiler lancing on fuel-burning equipment,if required, shall be accomplished only between noon and 4:00 p.m. upon approval of the Director.

d. Total Suspended Particulates, Emergency Status

When the Director declares an Emergency Status for particulates, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailment designated by the Director.

(1) Incineration of any form of solid or liquid waste shall be prohibited.

(2) There shall be no open burning of any kind of fuel, waste, vegetation, refuse, or other material.

(3) During the heating season, the operation of heating units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, shops, hotels, schools, recreational facilities, libraries, auditoriums, warehouses, etc., but not including hospitals, sanatoriums, children's homes, and homes for aged and infirm, shall be at thermostat temperature settings no higher than 60 degrees Fahrenheit.

(a) Exceptions to this action are allowed for persons who are aged, infirm, or ill and under the care of a physician. Exceptions are also allowed under formal permit for facilities where a drastic change in temperature could result in irreparable damage, such as computer rooms, environmental laboratories, cryogenic materials facilities, hazardous material storages, and meat lockers.

(4) During the heating season, heating units in single-family and small multi-family dwellings (six-family units or less) that are equipped with thermostats shall operate at settings no higher than 60 degrees Fahrenheit. Heating units that are not regulated by thermostats shall be operated at a rate that is approximately 20 percent lower than normal for the corresponding season and weather conditions. [See (3a), above]

(5) During the air conditioning season, the operation of central air conditioning units in all buildings within the affected areas in Alabama, including public and private office buildings, apartment houses, hotels, shops, schools, recreational facilities, libraries, auditoriums, warehouses, and single-family and multi-family dwellings, but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no lower than 80 degrees Fahrenheit. All room air conditioning units in operation shall be at the setting that provides the least rate of cooling. [See (3a), above.]

(6) All places of employment where large amounts of power, heat, or hot water are used shall immediate suspend such operations. The establishments include:

(a) Wholesale and retail laundries and dry cleaning establishments.

(b) Beauty shops and other users of electrical or gas driers.

(c) Bakeries of bread, pastries, pizza, etc.

(d) Public baths, steam rooms, and heated swimming pools.

(7) Places of employment shall release working personnel ahead of normal close of day, and on a staggered arrangement based upon travel time to residence for each employee.

(8) All outdoor construction and demolition work will be suspended until episode termination, except for work that, if left unfinished, might result in a public hazard.

(9) All commercial and manufacturing establishments not specifically mentioned in this order will institute such actions as will result in reduction of particulate emissions to the maximum reasonable extent.

e. Sulfur Dioxide, Alert Status

When the Director declares an Alert Status for sulfur dioxide, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailments designated by the Director.

(1) Solid waste incineration from office buildings, apartment houses, and industrial facilities not specifically designated by the Director shall be accomplished only between noon and 4:00 p.m.; however, voluntary postponement until episode termination is desirable.

(2) There shall be no open burning of coal, heavy oil, or other material that could contain sulfur.

(3) Boiler lancing, where required, will be limited to between noon and 4:00 p.m.

f. Sulfur Dioxide, Warning Status

When the Director declares a Warning Status for sulfur dioxide, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailments designated by the Director.

(1) Solid or liquid waste incineration from office buildings, apartment houses, and industrial facilities not specifically designated by the Director shall be postponed until episode termination.

(2) There shall be no open burning of tree waste, vegetation, refuse, or debris in any form.

(3) Soot blowing or boiler lancing on fuel-burning equipment, if required, shall be accomplished only between noon and 4:00 p.m. upon approval of the Director, Division of Air Pollution Control.

g. Sulfur Dioxide, Emergency Status

When the Director declares an Emergency Status for sulfur dioxide, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailments designated by the Director.

(1) Incineration of any form of solid or liquid waste shall be prohibited.

(2) There shall be no open burning of any kind of fuel, waste, vegetation, refuse, or other material.

(3) During the heating season, the operation of heating units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, hotels, shops, schools, recreational facilities, libraries, auditoriums, warehouses, etc., but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostats temperature settings no higher than 60 degrees Fahrenheit.

(a) Exceptions to this action are allowed for persons who are aged, infirm, or ill and under the care of a physician. Exceptions are also allowed under formal permit for facilities where a drastic change in temperature could result in irreparable damage, such as computer rooms, environmental laboratories, cryogenic materials facilities, hazardous material storages, and meat lockers.

(4) During the heating season, heating units in a single-family and small multi-family dwellings (six-family units or less) that are equipped with thermostats shall operate at settings no higher than 60 degrees Fahrenheit. Heating units that are not regulated by thermostats shall be operated at a rate that is approximately 20 percent lower than normal for the corresponding season and weather conditions. [See (3a), above.]

(5) During the air conditioning season, the operation of central air conditioning units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, hotels, shops, schools, recreational facilities, libraries, auditoriums, warehouses, and single-family and multi-family dwellings, but not including hospitals,

sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no lower than 80 degrees Fahrenheit. All room air conditioning units in operation shall be at the setting that provides the least rate of cooling. [See (3a), above.]

(6) All places of employment where large amounts of power, heat or hot water are used shall immediately suspend such operations. The establishments include:

(a) Wholesale and retail laundries and dry cleaning establishments.

(b) Beauty shops and other users of electrical or gas driers.

(c) Bakeries of breads, pastries, pizza, etc.

(d) Public baths, steam rooms, and heated swimming pools.

(7) Places of employment shall release working personnel ahead of normal close of day, and on a staggered arrangement based upon travel time to residence for each employee.

h. Carbon Monoxide, Alert Status

When the Director declares an Alert Status for carbon monoxide, any person responsible for the operation of a source of such air pollutant shall take the following general measures in addition to all specific source curtailment designated by the Director.

(1) Transit authorities shall operate at peak-hour intervals.

(2) The public shall make every effort to curtail unnecessary use of private vehicles and to use public transit for local travel.

(3) Sightseeing tours shall be cancelled.

(4) Operation of government vehicles shall be reduced to higher priority needs as defined by officials with the rank of bureau chief, or equivalent.

(5) The public shall make every effort to avoid downtown areas where concentrations of carbon monoxide are highest.

i. Carbon Monoxide, Warning Status

When the Director declares a Warning Status for carbon monoxide, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailment designated by the Director.

(1) Passenger vehicles entering or operating in the center city area shall be restricted to those carrying four or more persons, except for outbound vehicles that have discharged passengers within the restricted area. The center city area shall be defined by the Director.

(2) The public shall be notified in advance by news media that no automobile or truck traffic will be permitted within the center city area, as defined, if and when an Emergency Status for carbon monoxide is declared.

(3) Designated principal avenues shall be made one-way outbound from the center city area. These shall be designated by the Director.

j. Carbon Monoxide, Emergency Status

When the Director declares an Emergency Status for carbon monoxide, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailment designated by the Director.

(1) No automobile or truck traffic shall be permitted within the center city area except for designated emergency vehicles.

(2) All unnecessary use of vehicles shall be prohibited throughout the remainder of affected urban areas.

(3) Idling of vehicle engines while the vehicles are parked shall be prohibited.

(4) All stores shall be closed except for those engaged in the sale of food and medicines.

(5) Through bus and truck service shall be rerouted to avoid the center city.

(6) Scheduled bus service shall be curtailed.

(7) Scheduled flights originating at Birmingham Airport shall be cancelled. Flights scheduled to terminate at Birmingham Airport shall be diverted to alternate airports.

k. Nitrogen Dioxide, Alert Status

When the Director declares an Alert Status for nitrogen dioxide, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailment designated by the Director.

(1) Solid waste incineration from office buildings, apartment houses, and industrial facilities not specifically designated by the Director shall be accomplished only between noon and 4:00 p.m.; however, voluntary postponement until episode termination is desirable.

(2) There shall be no open burning of coal, heavy oil, or other material.

(3) Boiler lancing, where required, shall be limited to between noon and 4:00 p.m.

(4) The public transportation interests shall be notified and requested to plan for measures that will be initiated if the Warning Status for nitrogen dioxide is declared. Specifically:

(a) Transit authorities shall plan for peak-hour operations.

(b) The public shall make every effort to curtail unnecessary use of private vehicles and to use public transit for local travel.

(c) Sightseeing tours shall be advised to reduce activity in preparation for possible cancellation.

(d) Operation of government vehicles shall be reduced to higher priority needs as defined by officials with the rank of bureau chief, or equivalent.

(e) The public shall make every effort to avoid the normal boundaries of city downtown areas where concentrations of nitrogen dioxide tend to be highest.

l. Nitrogen Dioxide, Warning Status

When the Director declares a Warning Status for nitrogen dioxide, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailment designated by the Director.

(1) Solid waste incineration from office buildings, apartment houses, and industrial facilities not specifically designated by the Director shall be postponed until episode termination.

(2) There shall be no open burning of coal, heavy oil, or other material.

(3) Boiler lancing, where required, shall be limited to between noon and 4:00 p.m. upon approval of the Director.

(4) Transit authorities shall initiate peak-hour operations.

(5) Passenger vehicles entering or operating in the center city area shall be restricted to those carrying four or more persons, except for outbound vehicles that have discharged passengers within the restricted area. The center city shall be defined by the Director.

(6) No automobile or truck traffic shall be permitted within the center city area, as defined.

(7) Sightseeing tours shall be cancelled.

(8) Employees of all government offices - federal, state, and municipal - shall be dismissed early on a staggered basis. Private companies shall do likewise.

(9) Designated principal avenues shall be made one-way outbound from the center city area, as defined by the Director.

m. Nitrogen Dioxide, Emergency Status

When the Director declares an Emergency Status for nitrogen dioxide, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailments designated by the Director.

(1) Incineration of any form of solid or liquid waste shall be prohibited.

(2) There shall be no open burning of any kind of fuel, waste, vegetation, refuse, or other material.

(3) During the heating season, the operation of heating units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, shops, hotels, schools, recreational facilities, libraries, auditoriums, warehouses, etc., but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no higher than 60 degrees Fahrenheit.

(a) Exceptions to this action are allowed for persons who are aged, infirm, or ill and under the care of a physician. Exceptions are also allowed under formal permit for facilities where a drastic change in temperature could result in irreparable damage, such as computer rooms, environmental laboratories, cryogenic materials facilities, hazardous material storages, and meat lockers.

(4) During the heating season, heating units in single-family and small multi-family dwellings (six-family units or less) that are equipped with thermostats shall operate at settings no higher than 60 degrees Fahrenheit. Heating units that are not regulated by thermostats shall be operated at a rate that is approximately 20 percent lower than normal for the corresponding season and weather conditions. [See (3a), above.]

(5) During the air conditioning season, the operation of central air conditioning units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, hotels, shops, schools, recreational facilities, libraries, auditoriums, warehouses, and single-family and multi-family dwellings, but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no lower than 80 degrees Fahrenheit. All room air conditioning units in operation shall be at the setting that provides the least rate of cooling. [See (3a), above.]

(6) All places of employment where large amounts of power, heat, or hot water are used shall immediately suspend such operations. The establishments include:

(a) Wholesale and retail laundries and dry cleaning establishments.

(b) Beauty shops and other users of electrical or gas driers.

(c) Bakeries of bread, pastries, pizza, etc.

(7) All stores shall be closed except for those engaged in the sale of food and medicines.

(8) All outdoor construction and demolition work shall be suspended until episode termination, except for work that, if left unfinished, might result in a public hazard.

(9) All commercial and manufacturing establishments not specifically mentioned in this order shall institute such actions as will result in reduction of nitrogen dioxide emissions to the maximum reasonable extent.

(10) Places of employment shall release working personnel ahead of normal close of day, and on a staggered arrangement based upon travel time to residence for each employee.

(11) No automobile or truck traffic shall be permitted within the center city area except for designated emergency vehicles.

(12) Unnecessary use of vehicles shall be prohibited throughout the remainder of the affected areas in Alabama.

(13) Idling of vehicle engines while the vehicles are parked shall be prohibited.

(14) Through bus and truck service shall be rerouted to avoid the center city area.

(15) Scheduled bus services shall be curtailed in accordance with prearranged plans.

(16) Scheduled flights originating at Birmingham Airport shall be cancelled. Flights scheduled to terminate at Birmingham Airport shall be diverted to an alternate airport outside the affected area.

n. Photochemical Oxidants, Alert Status

When the Director declares an Alert Status for photochemical oxidants, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailments designated by the Director.

(1) Solid waste incineration from office buildings, apartment houses, and industrial facilities not specifically designated by the Director shall be accomplished between noon and 4:00 p.m.; however, voluntary postponement until episode termination is desirable.

(2) There shall be no open burning of coal, heavy oil, or other material.

(3) Boiler lancing, where required, shall be limited to between noon and 4:00 p.m.

(4) The public transportation interests shall be notified and requested to plan for measures that shall be initiated if the Warning Status for photochemical oxidants is declared. Specifically.

(a) Transit authorities shall plan for peak-hour operations.

(b) The public shall make every effort to curtail unnecessary use of private vehicles and to use public transit for local travel.

(c) Sightseeing tours shall reduce activity in preparation for possible cancellation.

(d) Operation of government vehicles shall be reduced to higher priority needs as defined by officials with the rank of bureau chief, or equivalent.

(5) Fuel oil companies serving domestic users shall plan on cancelling deliveries if and when a Warning Status for photochemical oxidants is declared.

(6) Transfer of fuel oil, gasoline, diesel oil, and kerosene to tank trucks from storage tanks, whether above or below ground, shall be reduced by 50 percent of normal amounts.

(7) Transfer of aviation fuel to tank trucks from storage tanks at airports shall be permitted.

o. Photochemical Oxidants, Warning Status

When the Director declares A Warning Status for photochemical oxidants, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailments designated by the Director.

(1) Solid waste incineration from office buildings, apartment houses, and industrial facilities not specifically designated by the Director shall be postponed until episode termination.

(2) There shall be no open burning of coal, heavy oil, or other material.

(3) Boiler lancing, where required, shall be limited to between noon and 4:00 p.m. upon approval of the Director.

(4) Transit authorities shall initiate peak-hour operations.

(5) Sightseeing tours shall be cancelled.

(6) Employees of all government offices - federal, state and municipal - shall be dismissed early on a staggered basis. Private companies shall do likewise.

(7) All schools and universities shall be closed, and all available school buses shall supplement regular public transit buses in accordance with prearranged plans.

(8) Two hours after the Warning Status has been declared with a forecast to continue, all parking meter violations and restrictions to on-street parking shall be suspended.

(9) Taxi cruising shall be prohibited in all parts of the city.

(10) All deliveries and refuse collecting shall be curtailed.

(11) Sales of gasoline and diesel oil at service stations shall be limited to five gallons per vehicle. However, the public will be urged to use vehicles only to reach their intended parking places for the duration of the episode.

(12) Fuel oil deliveries to all users shall be suspended, except to hospitals, sanatoriums, children's homes, homes for the aged and infirm, and special cases approved by the Director, Alabama Department of Health.

(13) Aircraft scheduled to terminate their flights at Birmingham Airport shall be diverted to an alternate airport outside the affected area.

(14) Aircraft departures from Birmingham Airport shall be separated by minimum time intervals of seven minutes.

(15) Transfer of fuel oil, gasoline, diesel oil, and kerosene to tank trucks from storage tanks, whether above or below ground, shall be reduced to 25 percent of normal amounts, or less.

(16) Run-ups of aircraft engines undergoing maintenance or repair shall be prohibited.

(17) All unnecessary transfer of aviation fuel to tank trucks from storage tanks at airports shall be prohibited.

p. Photochemical Oxidants, Emergency Status

When the Director declares an Emergency Status for photochemical oxidants, any person responsible for the operation of a source of such air pollutants shall take the following general measures in addition to all specific source curtailments designated by the Director.

(1) Incineration of any form of solid or liquid waste shall be prohibited.

(2) There shall be no open burning of any kind of fuel, waste, vegation, refuse, or other material.

(3) During the heating season, the operation of heating units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, shops, hotels, schools, recreational facilities, libraries, auditoriums, warehouses, etc., but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no higher than 60 degrees Fahrenheit.

(a) Exceptions to this action are allowed for persons who are aged, infirm, or ill and under the care of a physician. Exceptions are also allowed under formal permit for facilities where a drastic change in temperature could result in irreparable damage, such as computer rooms, environmental laboratories, cryogenic materials facilities, hazardous material storages, and meat lockers.

(4) During the heating season, heating units in single-family and small multi-family dwellings (six-family units or less) that are equipped with thermostats shall operate at settings no higher than 60 degrees Fahrenheit. Heating units that are not regulated by thermostats shall be operated at a rate that is approximately 20 percent lower than normal for the corresponding season and weather conditions. [See (3a), above.]

(5) During the air conditioning season, the operation of central air conditioning units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, hotels, shops, schools, recreational facilities, libraries, auditoriums, warehouses, and single-family and multi-family dwellings, but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no lower than 80 degrees Fahrenheit. All room air conditioning units in operation shall be at the setting that provides the least rate of cooling. [See (3a), above.]

(6) All places of employment where large amounts of power, heat, or hot water are used shall immediately suspend such operations. The establishments include:

(a) Wholesale and retail laundries and dry cleaning establishments.

(b) Beauty shops and other users of electrical or gas driers.

(c) Bakeries of breads, pastries, pizza, etc.

(d) Public baths, steam rooms, and heated swimming pools.

(7) All stores will be closed except for those engaged in the sale of food and medicines.

(8) All outdoor construction and demolition work shall be suspended until episode termination, except for work that if left unfinished, might result in a public hazard.

(9) All commercial and manufacturing establishments not specifically mentioned in this order will institute such actions as will result in reduction of nitrogen oxides and hydrocarbon emissions to the maximum reasonable extent.

(10) Places of employment shall release working personnel ahead of normal close of day, and on a staggered arrangement based upon travel time to residence for each employee.

(11) All unnecessary use of vehicles shall be prohibited throughout all of the affected areas of Alabama.

(12) Idling of vehicle engines while the vehicles are parked shall be prohibited.

(13) Through bus and truck service will be rerouted to highways outside the affected areas in Alabama.

(14) Scheduled bus service shall be curtailed in accordance with prearranged plans.

(15) Scheduled flights originating at Birmingham shall be cancelled. Flights scheduled to terminate at Birmingham Airport shall be diverted to alternate airports outside the affected areas.

(16) Aircraft departures for through flights shall be separated by minimum time intervals of 15 minutes at Birmingham Airport and 10 minutes at Mobile Airport.

(17) All unnecessary transfer of aviation fuel to tank trucks at airports shall be prohibited.

(18) Run-ups of aircraft engines undergoing maintenance or repair shall be prohibited.

(19) Sales of gasoline and diesel oil at service stations shall be prohibited.

(20) Fuel oil deliveries to hospitals, sanatoriums, children's homes, homes for the aged and infirm, and special cases approved by the Director, Alabama Department of Health, shall be made only in response to emergency calls. Fuel oil deliveries to all other users shall be suspended.

Rule 6. EMISSION REDUCTION PLANS FOR TWO POLLUTANTS

a. The Director shall declare an Alert, Warning, or Emergency Status specific for two pollutants when the ambient concentrations of two pollutants simultaneously reach or exceed their respective Episode Criteria and meteorological conditions are such that pollutant concentrations can be expected to remain at those criteria levels for 12 or more hours or increase unless control actions are taken. When criteria levels correspond to different episode status for two pollutants, the Director shall declare the status of the higher of the two and any person responsible for the operation of a source of such air pollutants shall take the general measures of Rule 5, and specific source curtailments as designated by the Director.

b. When the action specified for one or two pollutants causes an increase rather than a decrease of emissions of the remaining pollutant, it will not be executed. The actions to be taken in such cases are described in Rule 7.

Rule 7. EMISSION REDUCTION PLANS FOR GENERAL EPISODES

The Director shall, in the event that ambient concentrations of three or more pollutants simultaneously reach or exceed their respective Episode Criteria and no improvement in meteorological conditions is forecast for the next 12 hours, declare a General Alert, Warning, or Emergency Status. In the event the crteria levels correspond to different statuses for each pollutant, the Director shall declare a general status corresponding to the highest individual status.

a. General Alert Status

When the Director declares a General Alert Status, any person responsible for the operation of a source of air pollutants shall take the following general measures and all specific source curtailments designated by the Director.

(1) Solid or liquid waste incineration from office buildings, apartment houses, and other industrial facilities not specifically designated by the Director shall be accomplished only between noon and 4:00 p.m.; however, voluntary postponement until episode termination is desirable.

(2) There shall be no open burning of tree waste, vegetation, refuse, or debris in any form.

(3) Soot blowing or boiler lancing on fuel-burning equipment, if required, shall be accomplished only between noon and and 4:00 p.m.

(4) Transit authorities shall initiate peak-hour operations.

(5) The public shall make every effort to curtail unnecessary use of private vehicles and to use public transit for local travel.

(6) Sightseeing tours will be cancelled.

(7) Operation of government vehicles shall be reduced to higher priority needs as defined by officials with the rank of bureau chief, or equivalent.

(8) The public shall make every effort to avoid downtown boundaries of affected cities in Alabama where pollutant concentrations are highest. The center city boundaries shall be defined by the Director.

(9) Gasoline and diesel oil deliveries to service stations shall be curtailed.

(10) Fuel oil deliveries to industrial users shall be curtailed.

(11) Fuel oil companies serving domestic users shall be advised through news media to plan on cancelling deliveries if and when a general Warning Status is declared.

(12) Transfer of fuel oil, gasoline, diesel oil, and kerosene to tank trucks from storage tanks, whether above or below ground, shall be reduced by 50 percent of normal amounts.

(13) Transfer of aviation fuel to tank trucks from storage tanks at airports shall be permitted.

b. General Warning Status

When the Director declares a General Warning Status, any person responsible for the operation of a source of air pollutants shall take the following general measures and all specific source curtailments designated by the Director:

(1) Solid waste incineration from all office buildings, apartment houses, and other industrial facilities not specifically designated by the Director shall be postponed until episode termination.

(2) There shall be no open burning of coal, heavy oil, or other material.

(3) Boiler lancing and soot blowing, where required, shall be limited to between noon and 4:00 p.m. upon approval of the Director.

(4) Passenger vehicles entering or operating in the center city area shall be restricted to those carrying four or more persons except for outbound vehicles that have discharged passengers within the restricted area.

(5) No automobile or truck traffic shall be permitted within the center city area, as defined.

(6) Designated principal avenues shall be made one-way outbound from center city. The principal avenues shall be designated by the Director.

(7) All schools and universities shall be closed, and all available school buses shall supplement regular public transit buses in accordance with prearranged plans.

(8) Two hours after the Warning Status has been declared, and is forecast to continue, all parking meter violations and restrictions to on-street parking shall be suspended.

(9) Staggered work hours shall be in effect in all government offices - federal, state, and municipal - and in privates offices as well.

(10) Taxi cruising shall be prohibited in all parts of Anniston, Birmingham, and Mobile.

(11) All deliveries and refuse collecting shall be curtailed.

(12) Operation of government vehicles shall be reduced to higher priority needs as defined by officials with the rank of bureau chief, or equivalent.

(13) Sales of gasoline and diesel oil at service stations shall be limited to five gallons per vehicle. However, the public shall be urged to use vehicles only to reach their intended parking places for the duration of the episode.

c. General Emergency Status

When the Director declares a General Emergency Status, any person responsible for the operation of a source of air pollutants shall take the following general measures and all specific source curtailments designated by the Director.

(1) Incineration of any form of solid or liquid waste shall be prohibited.

(2) There shall be no open burning of any kind of fuel, waste, vegetation, refuse, or other material.

(3) During the heating season, the operation of heating units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, shops, hotels, schools, recreational facilities, libraries, auditoriums, warehouses, etc., but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no higher than 60 degrees Fahrenheit.

(a) Exceptions to this action are allowed for persons who are aged, infirm, or ill and under the care of a physician. Exceptions are also allowed under formal permit for facilities where a drastic change in temperature could result in irreparable damage, such as computer rooms, environmental laboratories, cryogenic materials facilities, hazardous materials storages, and meat lockers.

(4) During the heating season, heating units in single-family and small multi-family (six-family units or or less) that are equipped with thermostats shall operate at settings no higher than 60 degrees Fahrenheit. Heating units that are not regulated by thermostats shall be operated at a rate that is approximately 20 percent lower than normal for the corresponding season and weather conditions. [See (3a), above.]

(5) During the air conditioning season, the operation of central air conditioning units in all buildings within the affected areas of Alabama, including public and private office buildings, apartment houses, hotels, shops, schools, recreational facilities, libraries, auditoriums, warehouses, and single-family and multi-family dwellings, but not including hospitals, sanatoriums, children's homes, and homes for the aged and infirm, shall be at thermostat temperature settings no lower than 80 degrees Fahrenheit. All room air conditioning units in operation shall be at the setting that provides the least rate of cooling. [See (3a), above.]

(6) All places of employment where large amounts of power, heat, or hot water are used shall immediately suspend such operations. The establishments include:

(a) Wholesale and retail laundries and dry cleaning establishments.

(b) Beauty shops and other users of electrical or gas driers.

(c) Bakeries of breads, pastries, pizza, etc.

(d) Public baths, steam rooms, and heated swimming pools.

(7) All outdoor construction and demolition work shall be suspended until episode termination, except for work that, if left unfinished, might result in a public hazard.

(8) All commercial and manufacturing establishments not specifically mentioned in this order shall institute such actions as will result in reduction of pollutant emissions to the maximum reasonable extent.

(9) All stores shall be closed except for those engaged in the sale of food and medicines.

Rule 8. EMISSION REDUCTION PLAN FOR LOCAL EPISODES (See Rule 3c)

a. The Director shall specify the area of the State affected when a Local Alert, Warning or Emergency Status is declared, or when an Accidental Episode for Common Pollutants occurs, based upon air quality and meteorological reports and predictions.

b. When the Director declares such a local episode, any person responsible for the operation from which excess emissions results, shall shut down such an operation and make repairs or alter the process as required to restore normal operations.

c. When the Director declares that a Local Alert, Warning, or Emergency Status is in effect for a delineated area, corresponding General Measures shall be applied as detailed in Rule 3, depending upon which pollutant(s) is/are being emitted in excess.

Rule 9. EMISSION REDUCTION PLANS FOR OTHER SOURCES

a. Any person responsible for the operation of a source of air pollutants as determined by the Director shall prepare standby plans for reducing the emissions of air pollutants during periods of an Episode Alert, Warning, and Emergency. Standby plans shall be designed to reduce or eliminate emissions of air pollutants in accordance with the objectives set forth in Rule 3.

b. Any person responsible for the operation of a source of air pollutants not designated by the Director shall when requested by the Director in writing, prepare standby plans for reducing the emission of air pollutants during periods of Episode Alert, Warning, and Emergency. Standby plans shall be designed to reduce or eliminate emissions of air pollutants in accordance with the objectives set forth in Rule 3.

c. Standby plans as required under Rule 9a shall be in writing and identify the sources of air pollutants, the amount of reduction of pollutants and a brief description of the manner in which reduction will be achieved during Episodes of Alert, Warning, and Emergency.

d. During Episodes of Alert, Warning, and Emergency Status,standby plans as required by this regulation shall be made available on the premises to any person authorized to enforce the provisions of applicable rules and regulations.

e. Standby plans as required by these rules and regulations shall be submitted to the Director of the Division of Air Pollution Control, State of Alabama, upon request within 30 days of the recept of such request; such standby plans shall be subject to review and approval by the Director. If in the opinion of the Director, a standby plan does not effectively carry out the objectives as set forth in these rules and regulations, the Director may disapprove it, state the reason for disapproval and order the preparation of an amended standby plan within the time period specified in the order.